DOCUMENT RESUME

ED 239 674 JC 840 047

AUTHOR Losak, John; Morris, Cathy
TITLE Integrating Research into Decision Making: Providing Examples for an Informal Action Research Model. Research Report No. 83-24.
INSTITUTION Miami-Dade Community Coll., Fla. Office of Institutional Research.
PUB DATE Jul 83
NOTE 17p.
PUB TYPE Reports - Descriptive (141) -- Guides - Non-Classroom Use (055)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Action Research; *College Administration; Community Colleges; *Decision Making; *Institutional Research; Policy Formation; Researchers; *Research Utilization; Two Year Colleges

ABSTRACT

One promising avenue for increasing the utilization of institutional research data is the informal action research model. While formal action research stresses the involvement of researchers throughout the decision-making process, the informal model stresses participation in the later stages of decision making. Informal action research requires that researchers: have a fair amount of informal knowledge of pressing issues and of the decision makers at their institution; use informal communication channels; anticipate information needs before they arise; provide concise and timely data, solicited or not, in easy-to-read language; and use multiple channels for disseminating data. Three brief case studies illustrate the use of informal action research at Miami-Dade Community College (MDCC). In one case, data on the effectiveness of immersing students in remedial work during their first term, in contrast to integrating regular and remedial courses, were used in the formulation of policy regarding mandatory placement. In the second case, a student survey focusing on perceptions of high school preparation spurred joint action by MDCC and local public schools toward improving the quality of high school education. In the final case, a student flow model was developed to illustrate to legislators and administrators the potential impact of new testing requirements. Researchers may profit from the informal model as a way to show decision makers the value of data for their deliberations. (LAL)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
R. McCabe
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
☐ This document has been reproduced as received from the person or organization originating it.
✓ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

ED239674

INTEGRATING RESEARCH INTO DECISION MAKING:

PROVIDING EXAMPLES FOR AN INFORMAL ACTION RESEARCH MODEL

Research Report No. 83-24

July 1983

John Losak

Cathy Morris

JC 840 047

Miami-Dade Community College

OFFICE OF INSTITUTIONAL RESEARCH

MIAMI-DADE IS AN EQUAL ACCESS/EQUAL OPPORTUNITY COMMUNITY COLLEGE AND DOES NOT DISCRIMINATE ON THE BASIS OF HANDICAP. 8/80

Integrating Research into Decision Making:
Providing Examples for an Informal Action Research Model

Abstract

The literature on action research delineates several crucial steps to ensure that research efforts will be used by educational institutions. Unfortunately, in many institutions of higher education researchers are consulted after solutions are implemented. This process bypasses most of the major steps suggested for action research. It is possible, however, to participate in the later steps of the action research model and to begin to educate decision makers to the usefulness of research input. This paper presents three examples of descriptive data collection and presentation to influence decision making. An informal action research model is suggested, and related to each example. These examples may be useful to practitioners who are unable, for whatever reasons, to participate in decision making at all of the points specified by the formal action research model.

Integrating Research Into Decision Making:

Providing Examples For An Informal Action Research Model

Educational journals reflect an increasing sophistication in research studies. State of the art computer software allows for complex statistical analyses, and in some cases reproductions of computer pages themselves appear in lieu of simple tables (Bloom, 1983). The question remains, however, are these increasingly sophisticated studies being increasingly used in decision making?

The answer is not encouraging. Hamberg (1978) notes that administrative literature still views institutional research as a neutral data collection function in response to decision making. He strikes an optimistic note by stating that research will become increasingly important in college management in the future. Braskamp and Brown (1980) conclude that traditional educational research does not make a difference--the results are not used for decision making. Hogan (1981) states that research conducted under the classical evaluation model does not work either. He notes that typically the evaluator is solely responsible for completing each step in the evaluation and works in relative isolation. The final report is usually submitted long after relevant decisions have been made at administrative levels.

Weiss (1982) enlarges these observations to all of social science research. During the 1970's there was a persistent complaint of data nonutilization and the waste of research efforts. She argues, however, that while research may not supply a specific answer that policy makers employ, it

does shape the way they conceptualize issues. Research "widens the range of options that they consider... and challenges some taken-for-granted assumptions about appropriate goals and appropriate activities" (p. 621). Weiss (1982) also notes that the very fact that research units are incorporated into institutions is an indication of a commitment to use information. If a commitment to use information does exist in our institutions, how might we build upon this to increase research effectiveness?

One promising avenue for research effectiveness is the model called "action research". Since the late 1930s, action research has primarily focused on classroom settings and improved teaching practices (Best, 1970). An early leader in the field described it as research that is "undertaken by those who may have to change the way they do things as a result of the studies" (Corey, 1953). In the early 1980s, the action research model has been proposed as one possible solution to the nonutilization of institutional research data. The key to the model is its participant nature (Hogan, 1981).

Action research stresses the involvement of researchers with decision makers throughout the decision making process. Researchers facilitate the gathering of information concerning user goals and problems, and they facilitate the problem-solving process itself. Action research generates information about needs, solutions, and implementations, and above all it gets information back to the users (Buhl and Lindquist, 1981). The presumed key to action research is such user involvement with the entire research process, which leads to a feeling of ownership of the data by decision makers who are then very likely to use the data. Action research is not intended to advance

scientific knowledge but rather to provide knowledge for immediate decision making (Buhl and Lindquist, 1981).

Action research obviously implies that researchers are involved in the discussion of issues early on. In this sense, the action research model buys into the notion that decision making consists of purposeful or at least reasonably sequential acts. By stating that action researchers can help assess needs, solutions, and implementations, Buhl and Lindquist (1981) mean that they participate in the whole sequence of the decision-making process. Action researchers would not, for example, be involved only after-the-fact in assessing policy implementation.

Unfortunately, much decision making is less formal and more undirected than this. Simon's (1957) classic study of administrative behavior recognized political and psychological factors. More recently, Weiss (1982) notes that policies may arise from unintended impacts of prior decisions (policy by default), officials may make impromptu accommodations (improvisations) with little lead time for research input, or direct political negotiations may occur where conflicting key interests are minimally satisfied. Responsible officials must take many factors into account, and when competing with these factors, neither the time frame nor the climate for decision making may favor the action research model.

It may be possible, however, to begin educating policy makers on the advantages of the basic participant nature of action research at later stages of decision making. Linkage with research efforts can occur any time researchers are aware enough of decision makers' concerns to provide useful

data to illuminate those concerns. In a setting of less structured decision making, this implies a fair amount of informal knowledge of pressing issues, and certainly implies several of Palola's (1981) suggestions. Among the most crucial of these are "get to the powerful" and "fit data to interests" (Palola, 1981, p. 54). He also suggests anticipating information needs before they arise. These same injunctions are echoed by Hackman (1983) who stresses the need to know your decision-makers and present data in a concise and reasonable way.

For those researchers who see themselves caught in a simple data collection role, an informal action research model may be beneficial. The basic tenets of this informal model would include:

(1) Know your decision-makers and establish informal communication channels (Palola, 1981, Hackman, 1983);

(2) Anticipate information needs before they arise;

(3) Provide concise and timely data, solicited or not, in easy to read language. (Lindquist, 1981);

and (4) Get these data to the powerful using multiple channels, (Palola, 1981).

The following paper presents three brief case studies of informal action research to aid decision making. These particular examples were chosen because of differences in the policy makers involved, because the linkages with decision making occured at different stages, and finally because different channels of communication were used to inform the decisions. In all of these examples, participant linkage with the research effort was accomplished by

informal discussions with key personnel. The most crucial factor in each case was knowledge of the pressing issues facing decision makers, and the ability to provide timely data for consideration.

Example 1 - Retention Rate and First Term Coursework

This example illustrates research efforts to help inform new policy when the existing "policy by default" was questioned. It also illustrates the provision of unsolicited data in a quick but useful manner. At Miami-Dade Community College students are assessed for basic skills prior to registration, and are prevented from enrolling in certain courses if their test scores are below specified levels. Students must complete remedial coursework in the skill areas needing improvement before they are free to enroll in the corresponding college level course. This system does not mandate that all remedial work be taken immediately, but rather prohibits certain course selections until remediation is accomplished. The majority of the courses at the college are open to students, and, as a result, students space their remediation over several terms.

Discussions began to occur among faculty and administrators about the benefits of requiring remediation earlier in the students' careers. Concerns about the sequencing of remediation came to the attention of researchers from informal committee contacts and from personal discussion with administrators. Several possible "solutions" were being considered. The most severe proposal was that of immersing students in remedial work during their very first term. Faculty advisors expressed concern that this might have an adverse impact on student retention. Students might be discouraged if they were not allowed to

take some program coursework during their first term. Administrators, on the other hand, felt that completion of remedial coursework initially would lead to greater success and therefore increased retention.

This issue obviously was one with a need for some data. Because the issue seemed to be gaining the kind of momentum that often leads to a quick solution, there was not time to do a controlled study of immersion versus non-immersion with subsequent retention as the outcome measure. Data files did exist, however, in which the validity of the placement instrument was assessed by looking at course grades in developmental courses and the basic core (English and Math) courses during the first term of enrollment. The earliest of these files provided data such that a two-year retention rate could be determined. It proved relatively easy to add to this file total credits registered for during the first term, so that any difference in credits between developmental plus core course credits and the total credits registered indicated that the student had taken some "other" coursework.

A descriptive analysis was conducted using the tested basic skills levels and combinations of first term coursework choices (developmental, core, other) to set up categories for grouping students. The outcome measure examined was retention rate. This relatively simple analysis revealed that retention rates were optimized when students selected a mixture of courses during their first term (other courses, as well as developmental and/or core). The data were heavily qualified by the fact that we were unable to identify the specific kinds of extra coursework taken by students, but the consistency of the findings in each student category supported the notion of better retention when students were allowed to choose a course of interest beyond the basic

requirements. This was particularly true for students at the lowest basic skills levels where attrition is generally the greatest. Another interesting finding was that students who pursued only "other" coursework with no developmental or core type courses did not have increased retention. For the group as a whole, and quite strikingly for part-time students, this type of course selection led to the lowest retention rate.

The data were summarized and issued as a short research report circulated to the faculty and administrators who were involved with the issue. The effect of this study was to delay any hard and fast decisions about immersing students in remedial work during their first term. An attempt is now under way to identify program courses in each area that a student could profitably take while in the process of remediation. Thus, rather than immersion, the policy seems to be aiming toward being more directive in what particular "other" coursework a student who is low in basic skills will be able to take.

Example 2 - High School Preparation

It is clear to faculty and administrators alike that students are coming to the college with deficiencies in basic skills. In this example a definite problem was noted and research input was sought to help clarify the problem. The data gathered helped clarify some issues and needs which were not well articulated previously. In this case, then, linkages with decision makers were established before any real decision making was perceived as necessary. The audience for the research was institutional administrators, but later expanded to include public school officials.

Administrators had a sense that high school students would eventually seek postsecondary education at some time in their careers. One question was whether the underprepared students had originally planned on attending college. Administrators were also sensitive to the fact that students might have a negative attitude toward remediation once they were in college. Finally, as placement testing became well established and results were communicated to local high schools, the public schools themselves were concerned at the basic skills level shown by some of their graduates.

In order to address these several concerns in a timely manner, it was decided to survey students enrolled in developmental/remedial courses. The study was aimed at gathering retrospective comments about high school preparation and also at soliciting opinions about enforced remediation at the college. In this sense the study is another good example of Linquist's (1981) quick, but useful, action research. Along with the survey data, high school course selection was investigated by examining transcripts for each student. The transcripts of the developmental/remedial students were contrasted with those from academically excellent (scholarship) students to look for differences in high school course patterns.

Results of this study were striking. For many of the students in remedial coursework, neither their original plans nor their high school curriculum reflected an intention to continue on to college. These students apparently later changed their minds and did enroll. Students were aware that too little was expected of them in high school, that they did not study, and they picked easy courses. There was widespread agreement among students that they were unaware of the expectations they would be facing in postsecondary

education. Finally, students commented that they had been helped by basic skills courses at the college, that they were better students now than in high school, and that they did not mind taking remedial courses.

Data from the study were first summarized in an insitutional research report. Because of the importance and visibility of this issue, the administration of the college decided to publish the research as a separate monograph for wide circulation which included public school officials. Partly as a result of discussions of the monograph and the findings of the study, the Boards of Trustees of the college and the public schools met and agreed to initiate changes to improve the quality of high school education, particularly for those students who indicated no intention of going to college. These retrospective data were also summarized in a short document for high school students to try to make them more aware of basic skills that should be acquired while in high school. Although this was a quickly initiated study, the findings were significant enough that it was eventually published in the College Board Review (Losak, Schwartz, and Morris, 1983).

Example 3 - Existing Quality Control Versus Proposed New Statewide Testing Requirements

This study is a good example of a reaction to decisions being formulated at the state level with little input from the colleges. It also illustrates Hackman's (1983) comments on effective presentation of data, particularly the use of algorithms. Finally, it demonstrates Palola's (1981) point that multiple channels for data should be sought. "Bullets," which are short targeted responses, were used rather heavily in this example.

A major issue in front of the state legislature is how to improve quality education in the State of Florida. Several proposals were being discussed and it was clear that impact data were needed. The proposals included instituting a statewide admissions test for two-year colleges, denying admission on the basis of this test, and forcing students to return to high school for remediation. These topics were subsumed at the State level under the general ruberic of quality control.

Consultation with administrators revealed concern over possible impacts of these policies. In order to address this question, it was suggested that a hypothetical student flow model (algorithm) be developed that would contrast current requirements with the requirements being proposed. This suggestion was well received, and the research office was formally directed to conduct a student flow study.

The particular "study" really amounted to the compilation of disparate pieces of data into a cohesive overview of the progress of students from ninth grade high school membership through community college graduation. As an example of some of the pieces of data that were combined, the flow included actual ninth grade membership, high school dropout rate, eventual graduation, entrance into postsecondary education, attrition at the post-secondary level, and associate degree completion. A second algorithm was developed which projected the hypothetical elimination of students at different stages. This included attrition of students who failed the high school "exit" test, screening out of students who would fail a college entrance test, and finally, the elimination of students who would fail the sophomore test required for receiving an associate degree. Proportional rates of failure at each of

these points were estimated as conservatively as possible in order to make a convincing argument that would still be accepted by proponents of quality control through testing. For example, estimates of how many students would be excluded if a statewide college entrance test were established came from national normative data from placement tests currently in use at the College. A very low (15 percentile) hypothetical cut score was used on data already available at the College.

Data were summarized in a series of charts showing the impact on students currently, and also with new testing requirements. The data were most striking and revealed the fact that considerable quality control already takes place in the classroom, in that almost a third of the ninth graders do not graduate high school, and only about one-third of the students who enter the open admissions college eventually graduate. The data also revealed that the new testing requirement would most severely impact blacks and Hispanics. Along with the prepared charts, separate pieces of the data were communicated to administrators. These included figures on the number of students who would presumably be sent back to high school for remediation, the number of students statewide who would be excluded from entrance to open access institutions, and the differential impact by ethnic category.

The charts themselves and the different impact findings at each point in the student flow were used in community meetings and in lobbying efforts at the State level. These data were also released to the local media and appeared in several editorials. As a result of this effort, reconsideration of the legislation occurred, and significant changes in the original proposals took place. This "study" is an example of the effective use of data where no formal

report was written, yet these data received perhaps the widest audience of any of the examples mentioned in this paper.

Conclusion

The action research model pinpoints key ingredients for research utilization. Optimal action research involves research participation at every stage of decision making. When research studies focus on specific questions and concerns of users, the data are likely to be used.

Concerns of decision-makers can be determined through processes less formal than those specified by the action research model. Research personnel can make an effort to stay informed about current issues through committee membership/minutes and through personal contacts with key administrators. The informal action research model suggested in this paper rests on anticipating information needs and providing timely data whether solicited or not. When unsolicited data begin to appear which clarify issues or problems, it is more likely that direct solicitation of research linkages will occur in the future. Example 1 in this paper involved unsolicited data. Example 3 occured at a later point in time and represents active seeking of research input.

It is hoped that researchers whose data are not currently being sought for decision making can profit from the informal model presented. As decision makers come to value the addition of data to their deliberations, the tenets of the more formal action research model may be able to be employed. Until such time, researchers need not simply wait to be asked. The pro-active

stance suggested above may be a good bridge from no participation in decision making to full participation at last.

References

Best, J.W. Research in Education. Englewood Cliffs, New Jersey: Prentice Hall, 1970.

Bloom, A. M. Differential Instructional Productivity Indices. Research in Higher Education. 1983, 18(2), 179-193.

Braskamp, L. A. and Brown, R. D. (Eds.) New Directions for Program Evaluation: Utilization of Evaluation Information. San Francisco: Jossey-Bass, 1980.

Buhl, L. C. and Lindquist, J. Academic Improvement Through Action Research. In J. Lindquist (Ed.) New Directions for Institutional Research: Increasing the Use of Institutional Research. San Francisco: Jossey-Bass, 1981, 3-25.

Corey, S.M. Action Research to Improve School Practices. New York: Columbia University, 1953.

Hackman, J. D. Stevens Maxims for Institutional Researchers: Applying Cognitive Theory and Research. Research in Higher Education, 1983, 18(2), 195-208.

Hamberg, R. L. Institutional Research As An Active Agent In Community College Policy Making and Planning, 1978, ED 192 858.

Hogan, T. P. The Wisconsin Evaluation Project. In J. Lindquist (Ed.) New Directions for Institutional Research: Increasing the Use of Institutional Research, San Francisco: Jossey-Bass, 1981, 27-43.

Losak, J. L., Schwartz, M. I. and Morris, C. College Students in Remedial Courses Report on Their high School Preparation. The College Board Review, Fall, 1982, 21-22.

Lindquist, J. Quick, Dirty, and Useful. In J. Lindquist (Ed.) New Directions for Institutional Research: Increasing the Use of Institutional Research, San Francisco: Jossey-Bass, 1981, 87-96.

Palola, E. G. Multiple Perspectives, Multiple Channels. In J. Lindquist (Ed.) New Directions for Institutional Research: Increasing the Use of Institutional Research, San Francisco, Jossey-Bass, 1981, 45-58.

Simon, H.A. Administrative Behavior. New York: Macmillan, 1957.

Weiss, C. H. Policy Research in the Context of Diffuse Decision Making. The Journal of Higher Education, 1982, 53 (6), 619-639.

ERIC Clearinghouse for Junior Colleges
8118 Math-Sciences Building
University of California
Los Angeles, California 90024

MAR 9 1984